The Endangered Right Whales—

Reducing the Threat of Ship Strikes with Mandatory Ship Reporting

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In December 1998, the International Maritime Organization (IMO), a Specialized Agency of the United Nations that addresses international shipping issues, unanimously approved a U.S. proposal to establish a mandatory ship reporting system to reduce ship strikes of the highly endangered North Atlantic right whale. Starting in July 1999, all commercial ships of 300 gross tons and greater will be required to report to a shore-based station when entering two right whale aggregation areas. This measure, in conjunction with other measures being taken by the United States, is an important attempt to help recover the species.

There are only about 300 right whales remaining in the North Atlantic. Ship strikes kill more right whales than any other source of human-related mortality. Best estimates indicate that an average of about two deaths or serious injuries per year result from collisions with ships, and since 1991, about one-half of all recorded right whale deaths have been attributed to ship strikes. This may represent only a fraction of the total number of whales killed by ships, as many deaths may go undetected if whales drift out to sea.

Although other large whale species may also be hit by ships, the behavior of right whales makes them particularly vulnerable to ship strikes. Right whales live close to shore, and in areas in or adjacent to major shipping lanes. Their feeding and calving areas, and migratory corridors are crossed by international shipping routes. Right whales spend much of their time at the surface, feeding, resting, mating, and nursing.

Calves are particularly vulnerable because they spend most of their time at the surface due to their undeveloped diving capabilities. Right whales appear to be unaware of approaching ships and apparently make little effort to avoid them. Thus, mariners cannot assume that whales will move out of their path. Mariners may have difficulty in seeing right whales because of their dark color and low profile in the water.

Recognizing that ship strikes are likely a major impediment to right

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whale recovery, the National Oceanic and Atmospheric Administration (NOAA) initiated a program aimed at reducing the likelihood of such occurrences. Much of the program is aimed at increasing mariner's awareness of the severity of the problem and seeking their input and assistance in minimizing the threat of ship strikes. One cornerstone of the program is the mandatory ship reporting system. The concept and design of the system was initiated by NOAA, the National Marine Fisheries Service (NMFS), and the U.S. Coast Guard (USCG), with significant input from the International Fund for Animal Welfare and the Marine Mammal Commission. The system has received strong backing from Congressmen William Delahunt (D-MA) and Wayne Gilchrest (R-MD).

The requirement for mandatory ship reporting is found in the Safety of Life at Sea Convention, Chapter V, regulation 8-1. Seven mandatory reporting systems exist world-wide. A reporting system for the Dover Straits/Pas de Calais was approved by IMO at the same time as the system proposed by the United States. The effective date for both of these systems was July 1, 1999.

The U.S. reporting system requires that commercial ships of 300 gross tons and greater report to a shore-based station when they enter two areas off the east coast of the United States: one off Massachusetts and one off Georgia and Florida (see charts on pages 28 and 29). The reporting system in the area off Massachusetts will operate year round while the one off Georgia and Florida will operate each year from November 15 to April 15, which corresponds with periods of right whale occurrence.

Ships will be required to report their course, speed, location, destination, and route. In return, ships will receive an automated message indicating that the ship is entering an area critical for right whales, that whales are likely to be in the area, and that ship strikes are a serious threat to whales and may cause damage to the ship. The message will also indicate to mariners where they can receive the most recent information on right whale locations, and if possible and when available, recent sighting information will be provided in the return message. The system requires reporting only and will affect no other aspect of vessel operations; there will be no cost to the mariner.

The return message will also contain advice on precautionary measures mariners may take to reduce the possibility of hitting right whales (see page 31). For example, mariners will be advised to refer to navigational publications such as the U.S. Coast Pilot, Sailing Directions, and nautical charts for information on relevant regulations, and the boundaries of the Gerry E. Studds Stellwagen Bank National Marine Sanctuary and right whale critical habitats. They will be advised to obtain information about the location of whales in their vicinity by monitoring various broadcast media, including the USCG's Broadcasts to Mariners, satellite-linked marine safety broadcasts, and NOAA Weather Radio. Right whale location information is obtained from aircraft surveys supported by the U.S. Navy, USCG, Army Corps of Engineers, NMFS, and the states of Massachusetts, Georgia, and Florida. In addition, mariners will further be advised that information placards, videos, and other educational materials are available from shipping agents, port authorities, relevant state agencies, the USCG, and NMFS.

Contact with the shore station will be transmitted via INMARSAT, a satellite-based, ship-to-shore communication system. Ships not equipped with INMARSAT should contact the USCG by VHF radio, which will in turn provide the return message described above. Specific reporting instructions will be provided by the USCG before the system is implemented.

Collectively, the reports will yield data on ship number and routes in right whale habitat which will be useful in identifying possible further measures to reduce ship/whale interactions. The entire program will be reviewed in three to five years to assess its effectiveness.

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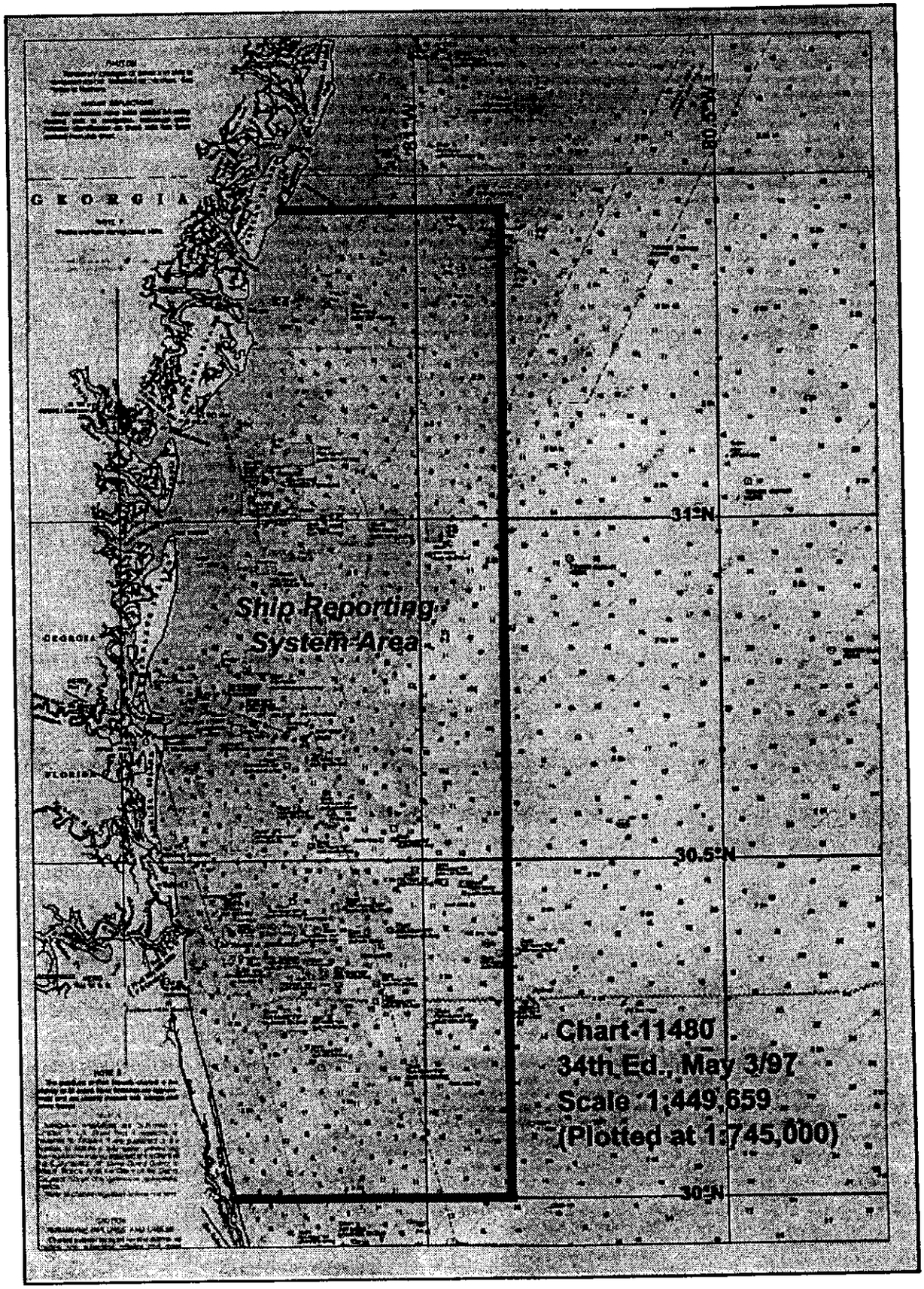
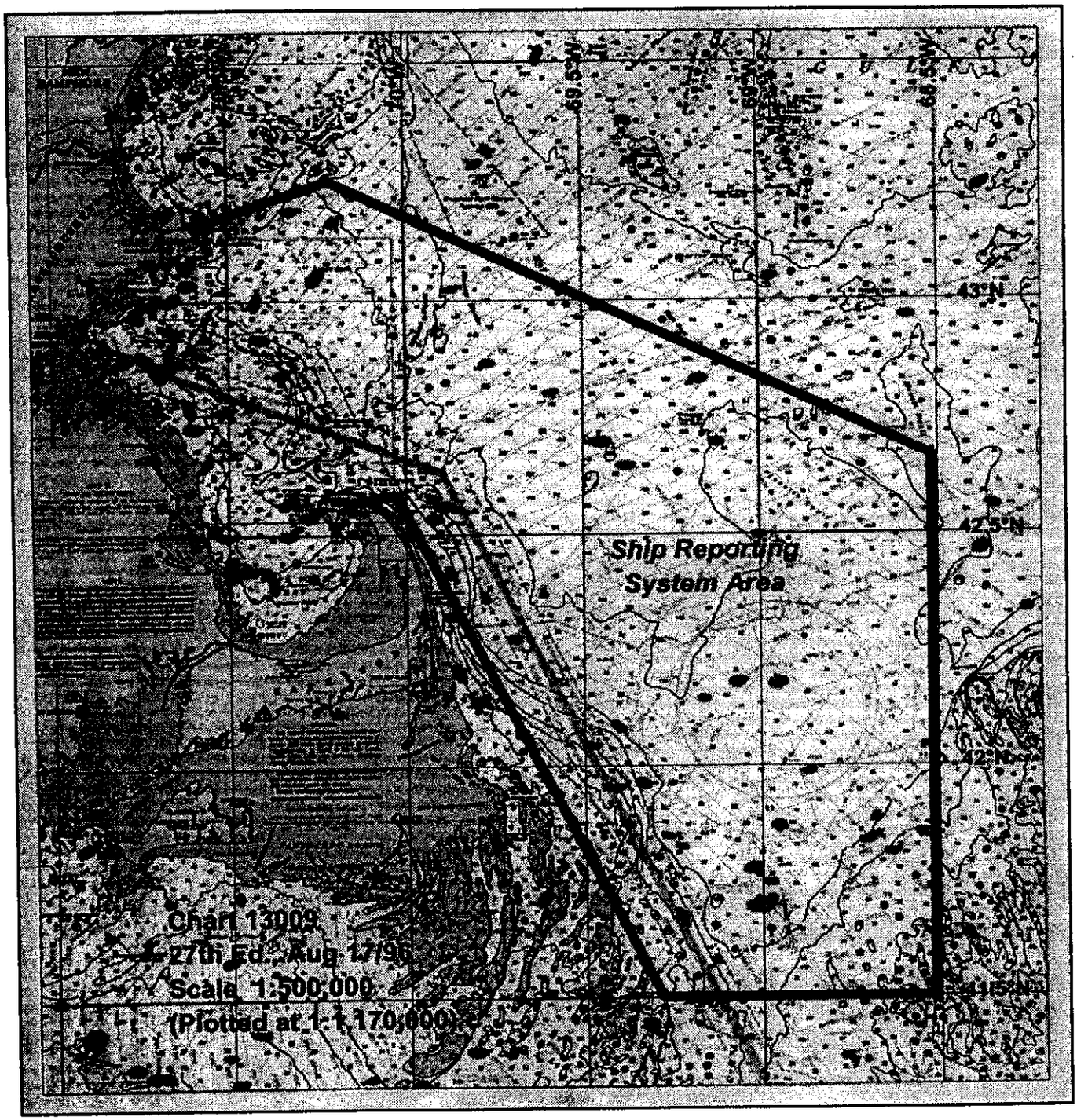

GEORGIA
31°N
30.5°N
30°N
Ship Reporting System Area
Chart 11480
34th Ed., May 3/97
Scale 1:449,659
(Plotted at 1:745,000)


43°N
42.5°N
42°N
41°N
Ship Reporting
System Area
Chart 13009
27th Ed. Aug 1/96
Scale 1:500,000
(Plotted at 1:1,170,000)

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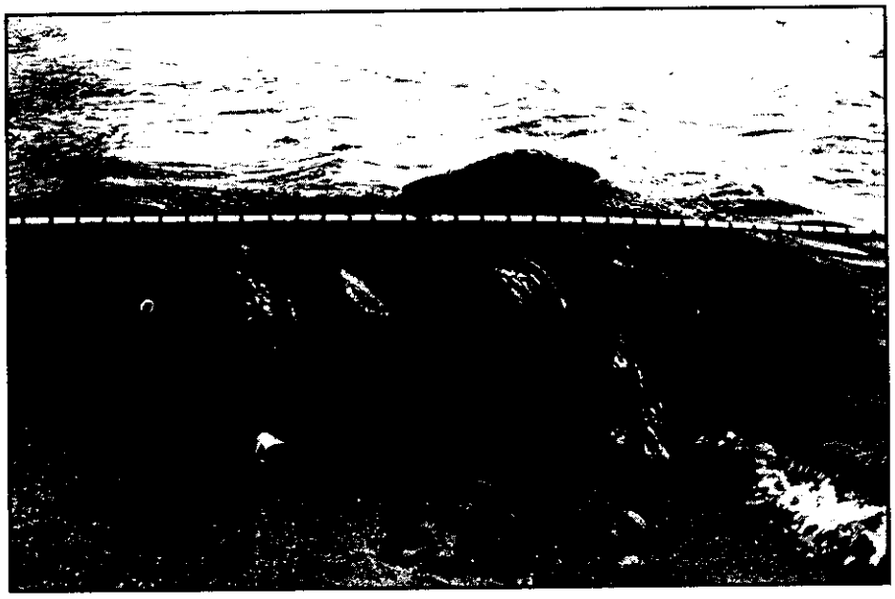
NMFS has taken a number of other steps in addition to the mandatory ship reporting system to reduce ship strikes of right whales. For example, in 1994, NMFS designated three right whale feeding and nursery areas along the U.S. east coast as "critical habitats." Other areas important to right whale protection have been established by the United States and Canada, including Stellwagen Bank National Marine Sanctuary off Massachusetts and a whale conservation area in the Bay of Fundy, Canada. In 1997, NMFS issued regulations requiring vessels and aircraft to stay a minimum 500 yards (460 m) from right whales.

In the northeastern and southeastern United States, NMFS established teams composed of representatives of government agencies, the maritime industry, and the scientific community to coordinate right whale protective measures. Among other things, these teams have coordinated the right whale aircraft survey programs. Surveys are conducted off the southeastern United States from December to March (the peak calving period), and whale sightings are broadcast to all vessels in the area by the U.S. Navy. In the northeastern United States, whale advisories and sightings are broadcast periodically by NMFS, and maps of right whale sightings are posted on the Internet by the Massachusetts Office of Environmental Affairs and NMFS (http://whale.wheelock.edu). With significant input and advice from the International Fund for Animal Welfare, the regional recovery teams, and the Marine Mammal Commission, NOAA and NMFS staff are ensuring that information on right whales in relevant navigational publications is timely and accurate.

Whale carried on the bow of a ship after it was struck and killed. Ship strikes are more common among right whales than for other whale species.



A dead whale stranded on the beach. The deep lacerations, from a ship's propeller, killed this whale.

These steps, including the establishment of the mandatory ship reporting system, are attempts to address the serious threat posed by ships to the very survival of the North Atlantic right whale. Although none of these steps alone can ensure survival, this mosaic of protective measures will assist in reducing ship strikes. Efforts to further increase protection of this species will require continued close cooperation between the maritime community, environmental groups, and government entities.⚓

Steps Mariners Can Take To Avoid Collisions with Critically Endangered Right Whales

When transiting right whale critical habitat:

- As soon as possible prior to entering right whale critical habitat, check U.S. Coast Guard Broadcast Notice to Mariners, NAVTEX, NOAA Weather Radio, Cape Cod Canal Vessel Traffic Control, the Bay of Fundy Vessel Traffic Control, and other sources for recent right whale sighting reports.
- When entering ports on the U.S. east coast, refer to Coast Pilot and Notice to Mariners, review right whale identification material described in those documents, and maintain a sharp watch with lookouts familiar with spotting whales. Ask port officials, port pilots, and Coast Guard officers for additional information on right whales.
- When planning passage through right whale critical habitat, attempt to avoid night-time transits, and whenever practical, minimize travel distances through the area. Anticipate delays due to whale sightings.
- When the ability to spot whales is reduced (e.g. night, fog, rain, etc.), mariners should bear in mind that reduced speed may minimize the risk of ship strikes.

In all coastal and offshore waters along the east coast of the U.S. and Canada:

- If a right whale sighting is reported within 20 nautical miles of a ship's position, post a lookout familiar with spotting whales.
- If a right whale is sighted from the ship, or reported along the intended track of a large vessel, mariners should exercise caution and proceed at a slow, safe speed when within a few miles of the sighting location, bearing in mind that reduced speed may minimize the risk of ship strikes.
- Do not assume right whales will move out of your way. Right whales, generally slow moving, seldom travel faster than 5-6 knots. Consistent with safe navigation, maneuver around observed right whales or recently reported sighting locations. It is illegal to approach closer than 500 yards of any right whale (see 50 CFR 222.32, Chapter 2).
- Any whale accidentally struck, any dead whale carcass spotted, and any whale observed entangled in fishing gear should be reported immediately to the U.S. or Canadian Coast Guard noting the precise location and time of the accident or sighting.

In the event of a strike or sighting, the following information should be provided to the U.S. Coast Guard:

- Location and time of the accident or sighting.
- Speed of the vessel.
- Size of the vessel.
- Water depth.
- Wind speed and direction.
- Description of the impact.
- Fate of the animal, if known.
- Species and size, if known.

Right whales can occur anywhere along the east coast of the U.S. and Canada. Mariners are urged to exercise prudent seamanship in their efforts to avoid right whales.

For more information, contact:

National Marine Fisheries Service
Northeast Region
One Blackburn Drive
Gloucester, MA 01930-2289

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Method of Reporting

Vessels transiting MSR reporting areas are required to report their course, speed, position, destination, and route to the U.S. Coast Guard upon entry into the reporting area. Vessels should report via INMARSAT-C or other satelite communications to one of the following addresses:

E-mail: RightWhale.MSR@noaa.gov *or* Telex: 236737831

Vessels unable to use satellite communications should contact the U.S. Coast Guard Communication Area Master Station Chesapeake VA via published voice or SITOR/NBDP frequencies. See page 66 of this issue for details.

Reporting Instructions

Vessels shall make reports in accordance with the format in IMO Resolution A.648(16) General Principles for Ship Reporting Systems and Ship Reporting Requirements. Vessels shall report the following information:

Paragraph	Function Information Required	
System name	System identifier	Ship reporting system name (whalesnorth or whalessouth).
A	Ship	Vessel name and call sign.
B	Date, time, and month of report	Six digit group giving day of month and time, single letter indicating time zone, and three letters indicating month.
E	True course	3-digit number indicating true course.
F	Speed in knots and tenths	3-digit group indicating knots and tenths.
H	Date, time, and point of entry into system	Date and time expressed as in (B) and latitude and longitude expressed as a four digit group giving latitude, the letter N indicating north, followed by a / , a five digit group ginving longitude, and the letter W indicating west.
I	Destination and ETA	Name of port and arrival time expressed as in (B).
L	Route information	Route information should be reported as direct rhumbline to port (RL) and intended speed or a series of way points (WP). Vessels reporting waypoints should include latitude and longitude, expressed as in (H), and intended speed between waypoints. For vessels transiting within a traffic separation scheme (TSS), give only the WP on entry and departure of TSS.

Example Reports

WHALESNORTH

TO: RightWhaleMSR@noaa.gov
WHALESNORTH//
A/CALYPSO/NRUS//
B/031401Z APR//
E/345//
F/15.5//
H/031410Z APR/4104N/06918W//
I/BOSTON/032345Z APR//
L/WP/4104N/06918W/15.5//
L/WP/4210N/06952W/15.5//
L/WP/4230N/07006W/15.5//

WHALESSOUTH

TO: RightWhaleMSR@noaa.gov
WHALESSOUTH//
A/BEAGLE/NVES//
B/270810Z MAR//
E/250//
F/17.0//
H/270810Z MAR/3030N/08052W//
I/MAYPORT/271215Z MAR//
L/RL/17.0//